

Special Issue

Small-Scale Thermoelectric Generators

Message from the Guest Editors

With the development of technology and industry, the issue of energy consumption has become increasingly serious. The recovery and utilization of waste-heat energy have attracted increasing attention from multiple fields. Semiconductor thermoelectric generator technology is a new type of power generation technology, and its use in waste-heat energy recovery and utilization can improve energy efficiency. The working principle of a semiconductor thermoelectric generator is based on three basic concepts: the Seebeck, Peltier, and Thomson effects. Compared with other power generation methods, this process is noiseless and has no wear and medium leakage. In addition, the module has the advantages of small volume, light weight, convenient movement, and long service life. Thus, it is highly suitable for waste-heat energy recovery and utilization systems, especially for low-grade energy utilization. In this Special Issue, we aim to study the application and optimization of small-scale thermoelectric generators, as well as the combination and application of thermoelectric and cross-field technology.

Guest Editors

Dr. Yanzhe Li

Dr. Wei He

Dr. Yu Zhu

Deadline for manuscript submissions

closed (31 July 2023)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/159376

Micromachines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
micromachines@mdpi.com

[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



[mdpi.com/journal/
micromachines](https://mdpi.com/journal/micromachines)



About the Journal

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).